## **EAST Search History**

## **EAST Search History (Prior Art)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"4828941".pn. and membrane	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/01/11 11:32
S1	3	"2004021486"	DERWENT	ADJ	ON	2011/01/10 12:18
S2	1	"20060099482"	DERWENT	ADJ	ON	2011/01/10 12:19
S3	1	"20060099482"	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:20
S4	0	"20060099482" and silver	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:22
<b>S</b> 5	1	"20060099482" and ag	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:22
S6	4	"1425499"	DERWENT	ADJ	ON	2011/01/10 12:35
S7	1	"2003109614"	DERWENT	ADJ	ON	2011/01/10 12:44
S8	2	"03004156"	DERWENT	ADJ	ON	2011/01/10 12:45
S9	3	"2004023615"	DERWENT	ADJ	ON	2011/01/10 12:45
S10	2	"2004023615"	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:45
S11	1	"20040023615"	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:45
S12	1	"20040236157"	DERWENT	ADJ	ON	2011/01/10 12:46
S13	2	"20040236157"	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:46
S14	0	"20040236157".pn. and (silver or ag)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:46
S15	122	anion exchange with catalyst and catalyst with (ag or silver)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:49

S16	1	(US-20020198403-\$). did.	US-PGPUB	ADJ	ON	2011/01/10 12:57
S17	0	S16 and carbon with support	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:57
S18	1	S16 and carbon	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 12:57
S19	1	S16 and (direct or methanol)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:00
S20	0	S16 and fuel cell	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:01
S21	35	anion exchange with catalyst and catalyst with (ag or silver) and fuel cell	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:03
S22	47	anion exchange same catalyst and catalyst with (ag or silver) and fuel cell	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:08
S23	12	S22 not S21	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:08
S24	11	anion exchange with binder and catalyst with (ag or silver) and fuel cell	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:09
S25	12	anion exchange same binder and catalyst with (ag or silver) and fuel cell	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:10
S26	1	S25 not S24	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:10
S27	1	"10591176"	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:19
S28	1	"10/591176"	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:19
S29	1	S28 and anion exchange resin	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:20
S30	561	fuel cell and silver with catalyst and carbon with (support or supported or supporting)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:30

S31	7	fuel cell and silver with catalyst and carbon with (support or supported or supporting) and anion with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:31
S32	0	fuel cell and silver with catalyst and carbon with (support or supported or supporting) and vinylpyridine with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:32
S33	14	fuel cell and silver with catalyst and carbon with (support or supported or supporting) and vinylpyridine	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:32
S34	144	fuel cell and silver with catalyst and carbon with (support or supported or supporting) and catalyst with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:34
S35	51	(direct near4 fuel cell or dmfc) and silver with catalyst and carbon with (support or supported or supporting) and catalyst with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:35
S36	0	(direct near4 fuel cell or dmfc) and silver with catalyst and carbon with (support or supported or supporting) and catalyst with binder and binder same quaternary	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:41
<b>S</b> 37	0	(direct near4 fuel cell or dmfc) and silver with catalyst and carbon with (support or supported or supporting) and catalyst with binder and binder with anion	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:41
S38	2	(direct near4 fuel cell or dmfc) and silver with catalyst and carbon with (support or supported or supporting) and catalyst with binder and binder with exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:42

<b>S</b> 39	2	(direct near4 fuel cell or dmfc) and silver with catalyst and carbon with (support or supported or supporting) and binder with exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:42
S40	14	(direct near4 fuel cell or dmfc) and silver with catalyst and carbon with (support or supported or supporting) and binder same exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:42
S41	4	(direct near4 fuel cell or dmfc) and catalyst with binder with anion	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:43
S42	6	(direct near4 fuel cell or dmfc) and catalyst same binder with anion	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:44
S43	5	(direct near4 fuel cell or dmfc) and catalyst with binder same3 binder with anion	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:45
S44	7	(direct near4 fuel cell or dmfc) and catalyst with binder and binder same anion	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:45
S45	2	S44 not S43	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:48
S46	30	fuel cell and silver with catalyst and carbon with (support or supported or supporting) and ion with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 13:49
S47	39	fuel cell and (silver or ag) with catalyst and carbon with (support or supported or supporting) and ion with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:01
S48	183	fuel cell and (silver or ag) with catalyst and carbon with (support or supported or supporting) and catalyst with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:03

S49	16	fuel cell and (silver or ag) with catalyst and carbon with (support or supported or supporting) and catalyst with binder and binder with ionomer	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:03
S50	6	10/266965	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:06
S51	1	S50 and (ag or silveR)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:06
S52	0	(direct near4 fuel cell ordmfc) and (silver or ag) with catalyst and carbon with (support or supported or supporting) and catalyst with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:08
S53	62	(direct near4 fuel cell or dmfc) and (silver or ag) with catalyst and carbon with (support or supported or supporting) and catalyst with binder	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:08
S54	1	"20040013935".pn. and catalyst with (binder or ionomer) and binder and ionomer	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:27
S55	95	(direct near4 fuel cell or dmfc) and catalyst with anion	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:35
<b>S</b> 56	22	(direct near4 fuel cell or dmfc) and catalyst with anion and catalyst with (silver or ag)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:40
S57	1	(US-20030059655-\$). did.	US-PGPUB	ADJ	ON	2011/01/10 14:41
S58	1	S57 and anion\$6	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:41
<b>S</b> 59	73	S55 not S56	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 14:47
S60	13	(direct near4 fuel cell or dmfc) and ionomer with catalyst and ionomer with anion\$4	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:01

S61	27	(direct near4 fuel cell or dmfc) and ionomer with anion\$4	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:07
S62	14	S61 not S60	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:07
S63	8	(direct near4 fuel cell or dmfc) and binder with anion\$4	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:10
S64	63	(direct near4 fuel cell or dmfc) and (binder or ionomer) same anion\$4	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:10
S65	132	(direct near4 fuel cell or dmfc) and electrode with anion\$4	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:18
S66	14	(direct near4 fuel cell or dmfc) and electrode with quaternary	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:22
S67	48	(direct near4 fuel cell or dmfc) and catalyst with quaternary	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:26
S68	0	(direct near4 fuel cell or dmfc) and catalyst with (anode or anodic) exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:27
S69	0	(direct near4 fuel cell or dmfc) and catalyst sane (anode or anodic) exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:28
S70	4	(direct near4 fuel cell or dmfc) and catalyst same (anode or anodic) exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:28
S71	37	(direct near4 fuel cell or dmfc) and catalyst same (anion or anionic) exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:28
S72	632	vinylpyridine with (anion or anionic)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:35
S73	20	vinylpyridine with (anion or anionic) and "429". clas.	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:35
S74	48	(direct near4 fuel cell or dmfc) and electrode same (anion or anionic) exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:39

S75	22	S74 not S71	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:39
S76	11	(direct near4 fuel cell or dmfc) and (silver or ag) same (anion or anionic) exchange	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:42
S77	36	(direct near4 fuel cell or dmfc) and (silver or ag) same (anion or anionic)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:43
S78	25	S77 not S76	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:43
S79	4	"1425499"	DERWENT	ADJ	ON	2011/01/10 15:52
S80	4	"1426127"	DERWENT	ADJ	ON	2011/01/10 15:54
S81	1	"20040013935".pn.	DERWENT	ADJ	ON	2011/01/10 15:55
S82	1	"20040013935".pn.	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:55
S83	15	(direct near4 fuel cell or dmfc) and (catalyst or electrode) with ionomer and ionomer with (anion or anionic or vinylpyridine or pyridinium or pyridine)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 15:58
S84	24	(direct near4 fuel cell or dmfc) and (catalyst or electrode) with ionomer and ionomer same (anion or anionic or vinylpyridine or pyridinium or pyridine)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:00
S85	9	S84 not S83	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:00
S86	0	"20040013935".pn. and anion\$4	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:02
S87	1	"20040013935".pn. and membrane	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:02
S88	0	N-methylated resin of poly(4-vinylpyridine)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:07

S89	0	"N-methylated resin of poly(4-vinylpyridine)"	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:07
S90	2	N-methylated resin with 4-vinylpyridine	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:08
S91	4	(direct near4 fuel cell or dmfc) and (catalyst or electrode) with (ionomer or bindeR) and (ionomer or binder) same (pyridinium or alkyl ammonium or imidazolium)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:09
S92	42	(direct near4 fuel cell or dmfc) and (catalyst or electrode) with (ionomer or bindeR) and (pyridinium or alkyl ammonium or alkylammonium or imidazolium)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:12
S93	108	(direct near4 fuel cell or dmfc) and (anion or anionic) exchange (resin or membrane)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:21
S94	31	(direct near4 fuel cell or dmfc) and (anion or anionic) exchange (resin or membrane) and (silver or ag) same catalyst	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:22
S95	108	(direct near4 fuel cell or dmfc) and (anion or anionic) exchange (resin or membrane)	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:26
<b>S</b> 96	50	(anion or anionic) exchange (resin or membrane) and (silver or ag) with (catalyst) and "429".clas.	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:27
S97	33	S96 not S94	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/10 16:28
S98	1	"20060110653"	DERWENT	ADJ	ON	2011/01/10 16:30
S99	1	"20060110653".pn. and fluoroplastic	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/11 08:08

S100	1	"4828941".pn.	US-PGPUB; USPAT; EPO; JPO	ADJ	ON	2011/01/11 08:09
S101	51	("2913511"   "3198666"   "3483036"   "4116889"   "4390603"   "4478917").PN. OR ("4828941").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/01/11 08:34
S102	1	"20050058871".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/01/11 08:34
S103	0	"20050058871"".pn. and" anionic	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/01/11 08:38
S104	0	"20050058871"".pn. and" anion	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/01/11 08:38
S105	1	"20050058871".pn. and anionic	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/01/11 08:39
S106	1	"20050058871".pn. and anion	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/01/11 08:39
S107	27	S101 and cathode with (binder or polymer or ionomer)	US-PGPUB; USPAT; USOCR	ADJ	ON	2011/01/11 08:49

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